Units of Measurement  
Grade 5/6 Assessment  
Name:

**10 mm = 1cm  
100 cm = 1m  
1000 m = 1 km**

These units of measurement are used commonly

in everyday life.

**1. Complete the measure of each item below by adding either mm, cm or m next to the number**

M

M

   C:\Users\t08825812\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\LJRIG33X\MC900351435[1].wmf C:\Users\t08825812\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\DJADF21W\MC900286328[1].wmf

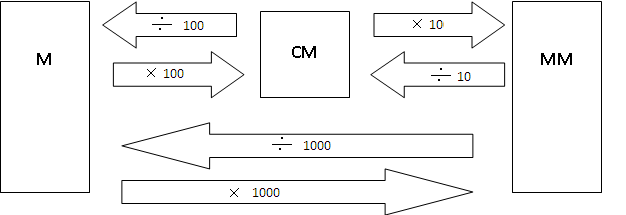
20 4 14 2 13 2

CM

CM

CM

This conversion box can help you convert units of length.



**3**

**2. Convert these lengths to metres:**

5

9

3

1. 300 cm = m **b**. 900 cm = m **c.** 500 cm = m

2.5

5.5

20

**d.** 2000 cm =m **e.** 250 cm = m **f.** 550 cm = m

**3. Convert these lengths to centimetres:**

2

1.5

5

1. 50 mm = cm **b.** 15 mm = cm **c.** 20 mm = cm

49.5

22.3

15.6

**d.** 156 mm = cm **e.** 223 mm =cm **d.** 495 mm = cm

**4. Convert these lengths to millimetres: (Hint: To convert from cm to mm, multiply by 10)**

30

70

50

1. 5 cm = mm **b.** 7 cm = mm **c.** 3 cm = mm

**5. Convert these lengths to metres: (Hint: To convert from millimetres to metres, divide by 100)**

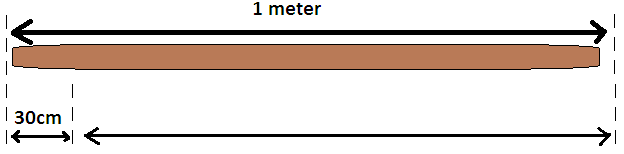
50

45

10

1. 1 000 mm = m **b.** 4 500 mm = m **c.** 5 000 mm m

**6. Have a look at the diagram below. Fill in the missing length.**



70

cm

**7. Estimate the lengths of the following lines and then use your ruler to find their actual length.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Line** | | **Estimate of Length**  **(cm, mm)** | **Actual Length**  **(cm,mm)** |
|  | Example: | 5 cm | 5 cm and 2mm |
|  |  | **2cm** | **1cm, 4mm** |
|  |  | **7cm** | **5cm, 7mm** |
|  |  | **4cm** | **4cm, 3mm** |
|  |  | **3cm** | **2cm, 8mm** |

**Perimeter**The perimeter of a shape is the distance around it’s outside.

We can find the perimeter of squares and rectangles without measuring every side.   
This rectangle has 2 sides measuring 2.5 cm and 2 sides measuring 4 cm.

To find the perimeter, we can do the following: (4 +4) + (2.5 + 2.5) = 8 + 5 = 13

2.5 cm

4 cm

Another way to organise this is  
2 x (L + W)  
Squares are even easier: 4 x L

**Use this method to work out the perimeter of the following shapes. Hint: Remember to write the unit in your answer.**

3 m

1. **b. c.**

2 cm 1 m 1.5 m 3 cm 4 m

Perimeter = 10cm Perimeter = 10m Perimeter= 9m

**Find the length of the sides marked red on the following shapes.**

12 cm

6.8 cm

1. **b. c.**

4cm

4.4 cm

40 mm 40 mm

5.4cm

4 cm

8 cm

Perimeter = 16.6 cm Perimeter = 28 cm

30mm

Perimeter = 110 mm

**Find the perimeter of rectangles that have the following dimensions.**

|  |  |  |
| --- | --- | --- |
| **Length** | **Width** | **Perimeter** |
| 6 cm | 2 cm | 16cm |
| 12.5 mm | 4 mm | 33mm |
| 5 m | 3 m | 16m |
| 150 cm | 130 cm | 560cm |

**Area**Area is the amount of space a shape covers. It is a 2D measurement.

We measure area in square units. For small areas we use square centimetres.

The formula to find the area of a shape, is L x W.

**Find the area of the following shapes.**

1. **b. c.**

81m

12cm

9 m

2 cm

2m 6 cm

6m

9 m

3m

**Find the area of the following:**

|  |  |
| --- | --- |
| **Object Dimensions** | **Area** |
| A rectangle measuring 8 cm x 5 cm | **40cm** |
| A pool measuring 25 m x 10 m | **250m** |
| A book measuring 35 cm x 12 cm | **420cm** |
| A box measuring 30 cm x 7 cm | **210cm** |
| A phone measuring 4.5 cm x 10 cm | **45cm** |
| A field measuring 60 m x 25 m | **1500m** |
| A rug measuring 10.2 m x 3.4 m | **34.68m** |
| A town square with 4 sides of 10 m | **40m** |

**1**

**Create your own word problems about measurement. Include all areas, 2 questions about perimeter and 2 questions about area. Include your working out and your answers.**

1. Perimeter

If there was a paddock with 4 sides, 2 of the sides were 9m, and the other 2 sides were 8m, what would the perimeter be?

(9 + 9) + (8 +8) = 34

1. Perimeter

If you had a square book with one side that had a perimeter of 3cm, what would be the perimeter?

(3 +3) +(3 +3) = 12cm

1. Area

If you had a calculator with one side with a perimeter of 6cm, and the other side 2cm, what would be the area?

6 x 2 = 12cm

1. Area

If I had a sign with one side that was 15cm, and the other side, 30cm, what would the area be?

15 x 30 = 450cm